1: Bowen C-4 (1945-1947) 1951 MK2 Maritime Arabs MK2

£300,000.[1] Wellsted stated that in 1835 the total value was £400,000.[2] Zwemer stated that the value of pearls shipped from Bahrein in 1896 was £303,941.[3]

Cox gives the value of pearls exported in 1925 as £220,000 from Bahrein and £9,000 from Lingeh in Iran, and for 1926 as £192,000 from Bahrein, £11,000 from Kuwait, and £5,200 from Lingeh (a total of about £208,000 for 1926); Cox further states that the true value was probably ten times these figures, for reasons he fails to clarify.[4] However, Thornburg has accepted this last statement of Cox's as a fact and has arrived at a figure of $10 million for the value of the Bahrein fisheries in 1926,[5] a figure that is unreasonably high. Thornburg estimates that in the years immediately following World War II the value of the Bahrein pearl fisheries was about $250,000; Kruegar states that in 1949 the value of the Bahrein pearl fisheries amounted to $200,000.[6] Rihani gives figures for the whole Gulf which amount to about $15 million,[7] the most absurd value published.

A summary of the more reliable figures would seem to be as follows:

1830's	$1,500,000
1835	2,000,000
1896	1,500,000
1925	1,200,000
1926	1,000,000
1946	250,000
1949	200,000

As can be seen from the above table, the value of the fisheries dropped to only a fraction of its previous value after the world depression of the thirties. It should also be pointed out that due to world inflation the figure of $200,000 for 1949 represents less than $100,000 on 1926 monetary standards. However, while the depression dealt the Gulf pearl fisheries a devastating blow, its

[1] D. Wilson, "Memorandum Respecting the Pearl Fisheries in the Persian Gulf," *Geographical Journal*, III (1883), p. 284.
[2] James R. Wellsted, *Travels in Arabia* (London, 1838), p. 264.
[3] Samuel M. Zwemer, *Cradle of Islam* (New York, 1900), p. 100.
[4] Percy Z. Cox, "Persian Gulf," *Encyclopedia Britannica* (Chicago, 1946), vol. 17, p. 605.
[5] Max Thornburg, "Bahrein," *Encyclopedia Americana* (New York, 1949), vol. 3, p. 482.
[6] H C. Kruegar, "Bahrein," *Collier's Encyclopedia*, II (New York, 1949), p. 668.
[7] Ameen Rihani, *Around the Coasts of Arabia* (London, 1930), p. 275.

1: Bowen C-4 (1945-1947) 1951 MK2 Maritime Arabs MK2

continued decline cannot be laid at its door. Japanese cultured pearls first started to appear on the market in quantities in the twenties just before the depression. As time has gone on the competition they offered has tended to become less and less, but on the other hand, the world demand for this gem has reached an all-time low, mainly because of the effect of the cultured pearl.

The introduction of cultured pearls and artificial pearls alike has had far-reaching effects on the natural pearl market. While they do not compete insofar as price is concerned when they are recognized as cultured, it takes an expert to distinguish them. Thus, the net effect of cultured pearls, and even more so of the expertly fabricated synthetic pearls, has been to cheapen the pearl as a precious gem in the eyes of those who wear them. There are actually some women who prefer cultured pearls, which are usually more uniform. As a result, natural Gulf pearls do not bring a tenth of what they did a quarter of a century ago at Bahrein.[8]

It is a strange fact that even though a cultured pearl is worth only a few percent of the value of real pearls, there are few pearl merchants in the Persian Gulf who can tell a good cultured pearl from the Gulf pearl without destroying the two in the effort.[8] Radiography (x-ray), x-ray diffraction, fluorescence under x-ray radiation, or specific gravity determinations, alone or in various combinations, may be used to detect cultured pearls, but these physical tests are not used by the Arabs for obvious reasons.

One might ask why cultured pearls have not been "introduced" into the Persian Gulf pearl market by divers, captains, or merchants. The Arab will tell you that this is improbable. The importation of cultured pearls into the Persian Gulf is prohibited, and in fact carries a severe penalty. The oysters are opened in sight of the divers, so they all know how many exceptional pearls the *nakhoda* (captain) receives and thus what exceptional pearls

[8] One of the world's leading authorities on the differentiation of cultured and natural pearls by their physical properties, Dr. A. E. Alexander, visited the Persian Gulf in 1947 to study the pearl fisheries and took with him a number of fine cultured pearls which he showed to a group of about thirty Bahrein pearl dealers. These Arabs had never seen a cultured pearl, whose importation is normally prohibited, and were astounded at its quality.

2: Villiers T-5 (1938-39) 1948 MK2 Maritime Arabs MK2
Kuwait MI1

repayed, and already was loaded with her cargo of salt and rice in sacks, and some mysterious parcels on deck for the Sultan of Mukalla. All her crew had their sea chests filled with trade goods from the cheap *suq* in the Crater at Aden; her carpenter was at work on a 40-foot dhow for sale on the voyage; and she had shipped several Suri and Omani merchants, from Aden, bound on a general trading voyage on their own account, wherever the dhow might take them.

We sailed first to Mukalla and Shihr, where we embarked passengers (the fare was eight rupees regardless of destination, the passengers providing their own food and looking after themselves entirely) and some further cargo. This consisted mainly of a parcel of condemned dates which it was hoped to sell to the Somali (or failing that, to feed to the Swahili labor in the Rufiji Delta, when loading mangrove poles), some dried shark which smelled high even aboard the dhow, some cooking stones, and a considerable quantity of basketware.

With this lot aboard, and the *nakhoda* pessimistic and depressed at the small number of passengers, though his dhow appeared crowded, we sailed first to Haifun, a salt port on the northeastern coast of Italian Somaliland. There we anchored among a fleet of dhows, and did nothing at all for some time. Finally, some rice was sold, some haberdashery smuggled into boats which the local Somali brought alongside, and lot of fish caught and dried. Then we went on to Mogadishu, running down the coast with the northeast monsoon. At Haifun another Kuwait ship was caught smuggling and heavily fined; and all the Kuwaiti in the harbour contributed to pay the fine. At Mogadishu, it was hoped to land a hundred or so passengers, but the Italians would not permit them to disembark. Trade there was extremely difficult, and little could be done. Some of the merchants left, as far as I could gather, to try to collect debts owing to them from previous voyages. Some smuggling went on (I saw a lovely carpet change hands), some of our passengers melted away and their places were taken by others, equally undocumented.

After a week or ten days we passed on down the coast to Lamu. Here more passengers landed and there was a determined attempt to sell the new dhow which the carpenter had completed. She

K MA 501 439 435 was a lovely little vessel which could carry some fifteen tons. The price asked was 1,000 East African shillings, or about $240. At that price, there was no buyer; she finally changed hands at 700 shillings. Lamu was a mangrove-pole port, but I gathered the trade was rather too well regulated for our nakhoda's taste, and we bought nothing.

K MA 439 505 Next came Mombasa, a port with a large dhow trade. Some figures I saw in the Report of the General Manager on the Administration of the Railways and Harbours (Kenya and Uganda) showed that the dhow trade was increasing, rather than diminishing. The latest returns I say, for the year ended December 31, 1937, showed that 1,427 dhows had arrived at Mombasa, an increase of ten percent on the previous year. These 1,427 dhows were computed to register -- if they had been registered -- nearly 40,000 tons. Many were Swahili, from Lamu and Zanzibar, but a large proportion was Arab. There was a native harbor set aside for them, and here we sold salt, landing it in our own longboat.

K MA [574] We got rid of our surviving passengers, gave feasts to merchants and officials of the native harbor (these were a great feature of the voyage, and were always accompanied by much monotonous singing and dancing), gathered tidings from brother nakhodas from Kuwait and Sur about trade prospects further south, collected debts, and finally departed toward Zanzibar.

K MA 501 396 439 There were three Indian and one Iranian deep-sea dhows in the port at Mombasa. The Iranian was an enormous vessel of over 400 tons -- the largest dhow I saw anywhere. She was a boom and had been built at Kuwait, but the Kuwaiti sold her because they found such large vessels uneconomic, in bad times, for the mere reason of their two great capacity. They brought too much to sell, when the market was depressed, and they could not wait indenfinitely to dispose of their cargoes because their overhead was too high, despite the fact that everything possible was done to keep down building costs, even to the sending of Kuwaiti shipwrights to the Malabar coast to build big vessels there, rather than carry the timber to Kuwait.

K MA 439 Zanzibar, at that season of the year, was an even busier Arab port than Mombasa. In the first month of the northeast season, over a hundred ocean-going dhows had arrived at Zanzibar, most

3: Bowen - C-4 (1945-1947) 1951 MK2 Maritime Arabs MK2

wave action, completely leveled almost all the 10 fishweirs on the Tarut Bay side of the Ras Tanura peninsula. All during the fishing season constant maintenance is necessary (Fig. 13).

Because of its shoal water, Tarut Bay is the only place along the Persian Gulf coast of Arabia where large fishweirs can be built, and one of the best weir locations in Tarut Bay is off the Ras Tanura peninsula. Things went peacefully among the weir tenders and owners until 1945, when the Saudi Arabian refinery project started in high gear. A deepwater oil-loading pier was built on the Gulf side of the end of the peninsula, and a huge pipeway was run from this pier to the refinery, some eight miles away. The pipeway passed close to several of the Tarut Bay fishweirs, and the considerable fill dumped into the bay changed the shore contour slightly

The Arab fishweir owners, ever alert to monetary opportunity, brought suits against the Arabian American Oil Company, asserting that the change in contour had reduced their fish catches and that the company's grading equipment had damaged some of their weirs. After the refinery was partly completed in October, 1945, oil was occasionally spilled into Tarut Bay and provided another complaint for the Arabs, who said that the oil contaminated their weirs. These complaints were such an annoyance to the oil-company executives that they instructed their agents to buy the fishweir rights. By 1947 only three of the original 10 weirs were left; the total price paid was about 72,000 Saudi riyals ($22,000). This money enriched the few Arabs who held the rights to the weirs, but to the Arabs in the Qatif Ras Tanura area the sale was an economic blow, for much of the fish supplied to Hasa Province came from the Ras Tanura traps.

Rock Mining

Another marine occupation is the "mining" of dead coral rock. Two types of coral are mined: *faroush* and *hasa*. Faroush is found on flat bottoms in level layers three to six inches thick. Four-man diving crews, operating from shallow-draft dhows[3] 30 to 45 feet long, pry a huge slab loose with iron bars or by simply lifting its edge. A rope is thrown around the slab, and it is hauled to the dhow, where it is broken up into easily handled pieces (Fig. 14). Diving for faroush can be relatively dangerous: I saw a diver with

[3] For a description of the dhows used in the marine industries of eastern Arabia see R. LeB. Bowen, Jr.: Arab Dhows of Eastern Arabia, *Amer. Neptune*, Vol. 9, 1949, pp. 87–132. The dhows are usually *jalbuts* (see Fig. 3 of the present article), but Bahrein and Kuwait send many *booms* and *sambuks* to the pearl fisheries in addition to the jalbuts. A few small *shoovs* and *battams* are also used by the fishermen (see Fig. 4 of the present article).

5: Harrison D-4 (1912-1924) 1924 M1 Middle East
Maritime Arabs MK2

turned from four months or more of exhausting work, during which time they have been half starved and have had no opportunity of finding enjoyment and pleasure, legitimate or otherwise. The result is precisely what might be expected. Persian rugs in the bazaar go up to twice their proper price as does anything else that the divers may fancy. Meat reaches the highest price of the year, and the same is true of fish, which food the divers enjoy above everything else. Gambling is all but universal. Immorality flourishes. This state of affairs lasts a month, perhaps two months. Then things gradually settle down into the regular winter stagnation until the next diving season.

The same thing happens on a smaller scale when the season opens. Advances are made to the men. Feasts are held. There is much good fellowship and coöperation as the preparations for the season are completed. The chanting of singers can be heard late into the night. The money advanced by the captains makes a great show as it is spent. Strangers come in from far and near to go out and dive with the local men, and the city wears such a gala appearance as it scarcely puts on again till the next season.

It is thus that an astonishingly attractive tinsel surface is maintained over an industry and a manner of life that even for Arabia are bitterly sordid and exhausting. The pearl diver's life is one of poverty, hard and cruel. In a bad season it is with difficulty that he gets enough to eat. His lot is distinctly worse than that of the date cultivator. Diving wrecks the health as no other Arabian occupation wrecks it. The high pressure of the water at great depths frequently bursts the ear drums, and it is a safe conjecture that no community of equal size anywhere can show

[*Lot of divers returning with their wages -- Analyst]